SPECIAL AIRWORTHINESS INFORMATION BULLETIN

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http://www.faa.gov/aircraft/safety/alerts/SAIB

This is information only. Recommendations aren't mandatory.

Introduction

This Special Airworthiness Information Bulletin advises you, owners and operators of **Garmin Model Transponders GTX 327, GTX 330, and GTX 330D**, of improvements in the pilot interface.

Background

A small airplane entered a restricted airspace with the airplane squawking what the pilot thought was the appropriate ATC assigned transponder code. The pilot missed the last digit when entering the code. The pilot saw the correct number on the transponder's display and assumed that the new transponder code was now active. However, the transponder was still responding to ATC ground interrogations with the previously entered code.

The problem was further aggravated because the last digit of the previously squawked transponder code was the same as the newly assigned code, thus reinforcing the pilot's perception that the new code had been accepted. For example, if the old code is 1200, and the new code is 5660, the new code would not be active until the forth digit "0" is entered, regardless of the fact that it is currently on the display as a remnant of the previously entered code.

The Garmin GTX-327 and GTX-330 Pilot's Guides are clear that the new transponder code is not activated until the operator enters the fourth and final digit.

The visual clue on the transponder's monochrome display is that the green cursor is still in view, framing the fourth digit position (where the digit is now inverted from green to black) until the operator enters the final digit of the assigned code.

We think this is an isolated incident, but since the transponder *can display* a transponder code different from the current "active" code, it is an item of concern.

Discussion

GTX 330 and 330D software version 4.03 and later versions provide improved interface with the pilot or operator. This software provides a "time-out" function. If the operator enters a partial transponder code and pauses the entry for any reason for more than 5 seconds, the displayed code reverts to the previously entered code. Garmin is planning additional enhancements with software version 4.04 by the end of 2005 to provide a "dash" in any field that has not been updated once the operator starts a code change. If no further code change is made, the "dashed" fields will remain for approximately 10 seconds and then all fields will revert to the previous entered code.

GTX 327 software version 2.09 and later versions provide the same improvements as those indicated for the GTX 330 and 330D above. It will be available by the end of 2005.

Recommendation

We recommend that if your aircraft is equipped with Garmin GTX 330 or GTX 330D transponders, you should have software version 4.03 loaded by complying with Garmin Service Bulletin (SB) # 0523.

If you have aircraft equipped with Garmin GTX 327 transponders, we recommend you have software version 2.09 loaded. A Garmin SB will be available by December 2005.

Garmin will issue SBs announcing further enhancements scheduled for later this year. Subsequent software revisions will also include these same improvements.

We recommend that you periodically review the operating procedures as outlined in the respective model's Pilot's Guide until the referenced software changes are made available.

Contact your local Garmin authorized dealer or go to www.garmin.com for more information.

For Further Information Contact

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